

IN THE TITLE:

Please amend the title to read "METAL GASKET AND A MATERIAL FOR ITS

A.PE 1

MANUFACTURE AND A METHOD FOR THEIR MANUFACTURE".

IN THE SPECIFICATION:

Please amend the Specification as follows.

On line 1, after the title, please insert "--This application is a continuation of

A.PE 2

International Patent Application No. PCT/JP02/04136 filed April 25, 2002. This PCT application was not in English as published under PCT Article 21(2)--.

Description

Subs.
A.PE 1
Inv.
A.PE 2

~~Metal gasket and a material for its manufacture
and a method for their manufacture~~

Technical Field

5 This invention relates to a metal gasket and particularly a metal gasket for an engine of an automobile or a motorcycle or the like, to a stainless steel for use in its manufacture, and to a method for their manufacture.

Below, the present invention will be explained in particular using a metal gasket for an engine as an example, but a metal gasket according to the present
10 invention is not limited thereto.

Background Art

An engine gasket referred to as a head gasket is a sealing member which is mounted between a cylinder head and a cylinder block and which prevents leakage of combustion gas or engine cooling water or oil.

15 In the past, as a head gasket, a composite type gasket having a structure in which a compressive member was wrapped in mild steel was used, but at present, almost all are metal gaskets essentially comprising a metal sheet.

A metal gasket for an engine (a head gasket) has the same outline as the portion to be sealed with the gasket and is constructed from about three sheets of
20 stainless steel having circular holes corresponding to combustion chambers (cylinders) stacked on top each other. An annular projection referred to as a bead is formed around each hole in the gasket [see Figures 3(a) and (b)], and sealing with respect to a high-pressure combustion gas or the like is guaranteed by intimate contact resulting from the resilience of the bead. The entire surface of the gasket on
25 the outer side of the bead is thinly coated with rubber in order to prevent the formation of scars on the surface of the steel sheets and to prevent the leakage of cooling water, oil, and the like running along the gasket. When forming the coating of rubber, heat treatment is typically carried out at a temperature up to about 350 °C